

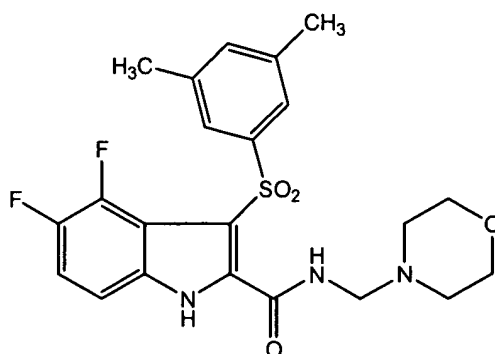
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

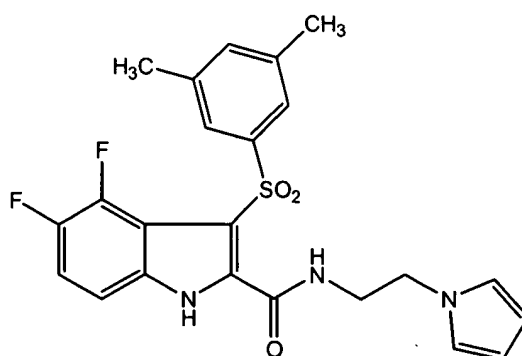
Claims 1-7 (cancelled)

Claim 8 (withdrawn): A compound of the formula



or a pharmaceutically acceptable salt thereof.

Claim 9 (withdrawn): A compound of the formula

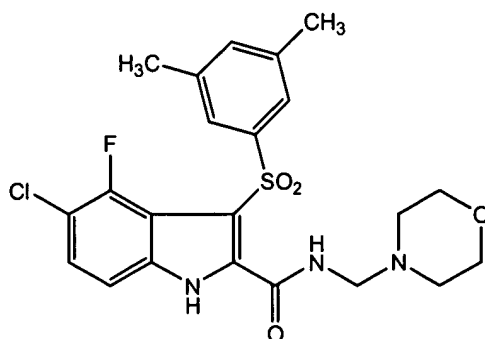


or a pharmaceutically acceptable salt thereof.

Claim 10 (cancelled)

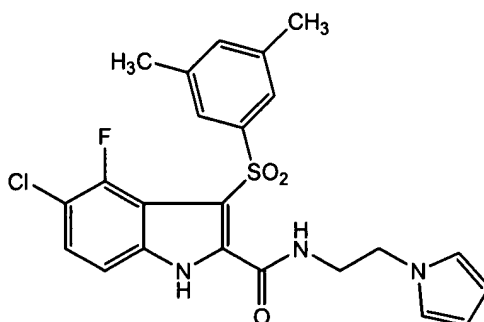
Claim 11 (cancelled)

Claim 12 (withdrawn): A compound of the formula



or a pharmaceutically acceptable salt thereof.

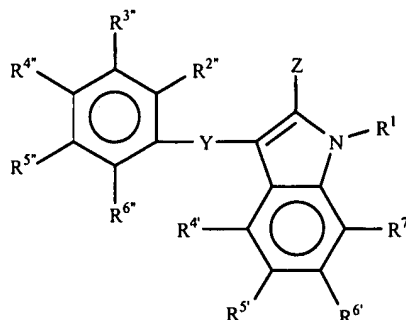
Claim 13 (withdrawn): A compound of the formula



or a pharmaceutically acceptable salt thereof.

Claims 14-18 (cancelled)

Claim 19 (previously presented): A method for the treatment or prophylaxis of an HIV-infection in a host comprising administering to said host an effective anti-HIV treatment amount of a compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid); or $-(CH_2)_p$ -(amino acid);

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$, $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHSO_2-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-CR^2R^2-S(O)_n-R^3$; $-CR^2R^2NH_2$; $-CR^2R^2NHR^2$; $-CR^2R^2NR^2R^3$; $-CR^2R^2-C(=O)R^2$; alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; or $-(CH_2)_p$ -(amino acid);

wherein if $R^{5'}$ is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHSO_2-C_{1-3}alkyl$; or $-NHCO-C_{1-3}alkyl$, then at least one of $R^{4'}$, $R^{6'}$ and $R^{7'}$ is not hydrogen; or alternatively, wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen;

Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)-NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl

bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^3$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; $-\text{CN}$; or halo;

Y is O; S; or $\text{S}(\text{O})_n$;

each W is independently O; S; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^2$; $-\text{N-CN}$; $-\text{N-NH}_2$; $-\text{N-NHR}^2$; $-\text{N-NR}^2\text{R}^3$; $-\text{N-OH}$; or $-\text{N-OR}^2$;

each R^2 is independently hydrogen; an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; or vinyl bromide;

each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^2$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^2$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; optionally substituted or unsubstituted aryl; optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl; optionally substituted or unsubstituted alkylheterocycle; optionally substituted or unsubstituted aralkyl; or optionally substituted or unsubstituted heterocycle-alkyl;

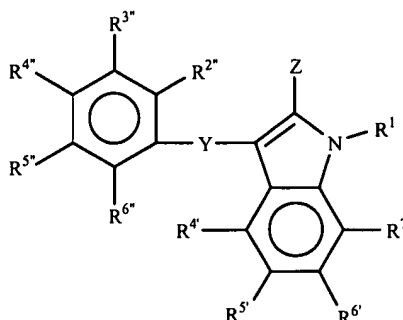
each n is independently 0, 1 or 2;

each p is independently 0, 1, 2, 3, 4 or 5; and

wherein the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl; lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl; or alkylheterocycle optionally is substituted with one or more of halogen; $-\text{OH}$; $-\text{OR}^2$; $-\text{SH}$; $-\text{SR}^2$; oxime; hydrazine; $-\text{C}(=\text{O})\text{H}$; $-\text{C}(=\text{W})\text{H}$; $-\text{C}(=\text{O})\text{R}^2$; $-\text{C}(=\text{W})\text{R}^2$; $-\text{C}(=\text{O})\text{OH}$; $-\text{C}(=\text{W})\text{OH}$; $-\text{C}(=\text{O})\text{OR}^2$; $-\text{C}(=\text{W})\text{OR}^2$; $-\text{C}(=\text{O})\text{SH}$; $-\text{C}(=\text{W})\text{SH}$; $-\text{C}(=\text{O})\text{SR}^2$; $-\text{C}(=\text{W})\text{SR}^2$; $-\text{C}(=\text{O})\text{NH}_2$; $-\text{C}(=\text{W})\text{NH}_2$; $-\text{C}(=\text{O})-\text{NHR}^2$; $-\text{C}(=\text{W})\text{NHR}^2$; $-\text{C}(=\text{O})\text{NR}^2\text{R}^3$; $-\text{C}(=\text{W})-\text{NR}^2\text{R}^3$; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{S}(\text{O})_n-\text{R}^3$; C_{1-3} alkoxy; C_{1-3} thioether; or an amino acid residue;

optionally in a pharmaceutically acceptable carrier or diluent.

Claim 20 (previously presented): A method for the treatment or prophylaxis of an HIV-infection in a host comprising administering to said host an effective anti-HIV treatment amount of a compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid); or $-(CH_2)_p$ -(amino acid);

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$, $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHCO-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-CR^2R^2-S(O)_n-R^3$; $-CR^2R^2NH_2$; $-CR^2R^2NHR^2$; $-CR^2R^2NR^2R^3$; $-CR^2R^2-C(=O)R^2$; alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; or $-(CH_2)_p$ -(amino acid);

wherein if $R^{5'}$ is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHCO-C_{1-3}alkyl$; or $-NHCO-C_{1-3}alkyl$, then at least one of $R^{4'}$, $R^{6'}$ and $R^{7'}$ is not hydrogen; or alternatively, wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen;

Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)-NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl

bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^3$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; $-\text{CN}$; or halo;

Y is O; S; or $\text{S}(\text{O})_n$;

each W is independently O; S; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^2$; $-\text{N-CN}$; $-\text{N-NH}_2$; $-\text{N-NHR}^2$; $-\text{N-NR}^2\text{R}^3$; $-\text{N-OH}$; or $-\text{N-OR}^2$;

each R^2 is independently hydrogen; an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; or vinyl bromide;

each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^2$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^2$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; optionally substituted or unsubstituted aryl; optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl; optionally substituted or unsubstituted alkylheterocycle; optionally substituted or unsubstituted aralkyl; or optionally substituted or unsubstituted heterocycle-alkyl;

each n is independently 0, 1 or 2;

each p is independently 0, 1, 2, 3, 4 or 5; and

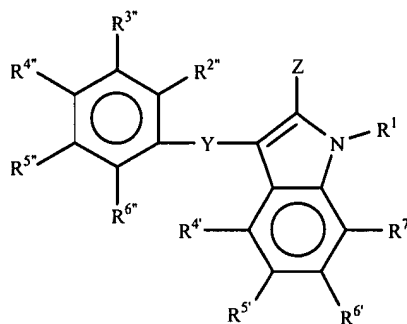
wherein the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl; lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl; or alkylheterocycle optionally is substituted with one or more of halogen; $-\text{OH}$; $-\text{OR}^2$; $-\text{SH}$; $-\text{SR}^2$; oxime; hydrazine; $-\text{C}(=\text{O})\text{H}$; $-\text{C}(=\text{W})\text{H}$; $-\text{C}(=\text{O})\text{R}^2$; $-\text{C}(=\text{W})\text{R}^2$; $-\text{C}(=\text{O})\text{OH}$; $-\text{C}(=\text{W})\text{OH}$; $-\text{C}(=\text{O})\text{OR}^2$; $-\text{C}(=\text{W})\text{OR}^2$; $-\text{C}(=\text{O})\text{SH}$; $-\text{C}(=\text{W})\text{SH}$; $-\text{C}(=\text{O})\text{SR}^2$; $-\text{C}(=\text{W})\text{SR}^2$; $-\text{C}(=\text{O})\text{NH}_2$; $-\text{C}(=\text{W})\text{NH}_2$; $-\text{C}(=\text{O})-\text{NHR}^2$; $-\text{C}(=\text{W})\text{NHR}^2$; $-\text{C}(=\text{O})\text{NR}^2\text{R}^3$; $-\text{C}(=\text{W})-\text{NR}^2\text{R}^3$; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{S}(\text{O})_n-\text{R}^3$; C_{1-3} alkoxy; C_{1-3} thioether; or an amino acid residue;

in combination and/or alternation with one or more other anti-HIV agent, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 21 (original): The method of claim 20, wherein the other anti-HIV agent is a reverse transcriptase inhibitor.

Claim 22 (original): The method of claim 21, wherein the reverse transcriptase inhibitor induces a mutation lysine 103 \rightarrow asparagine and/or tyrosine 181 \rightarrow cysteine in HIV reverse transcriptase.

Claim 23 (previously presented): A method for the treatment or prophylaxis of an HIV-infection in a host, wherein the HIV has a mutation at lysine 103 → asparagine and/or tyrosine 181 → cysteine in HIV reverse transcriptase, comprising administering to said host an effective anti-HIV treatment amount of a compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid); or $-(CH_2)_p$ -(amino acid);

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$, $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHCO-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-CR^2R^2-S(O)_n-R^3$; $-CR^2R^2NH_2$; $-CR^2R^2NHR^2$; $-CR^2R^2NR^2R^3$; $-CR^2R^2-C(=O)R^2$; alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; or $-(CH_2)_p$ -(amino acid);

wherein if $R^{5'}$ is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHCO-C_{1-3}alkyl$; or $-NHCO-C_{1-3}alkyl$, then at least one of $R^{4'}$, $R^{6'}$ and $R^{7'}$ is not hydrogen; or alternatively, wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen;

Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl

bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^3$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; $-\text{CN}$; or halo;

Y is O; S; or $\text{S}(\text{O})_n$;

each W is independently O; S; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^2$; $-\text{N-CN}$; $-\text{N-NH}_2$; $-\text{N-NHR}^2$; $-\text{N-NR}^2\text{R}^3$; $-\text{N-OH}$; or $-\text{N-OR}^2$;

each R^2 is independently hydrogen; an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; or vinyl bromide;

each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^2$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^2$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; optionally substituted or unsubstituted aryl; optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl; optionally substituted or unsubstituted alkylheterocycle; optionally substituted or unsubstituted aralkyl; or optionally substituted or unsubstituted heterocycle-alkyl;

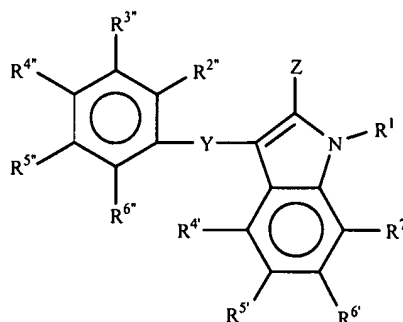
each n is independently 0, 1 or 2;

each p is independently 0, 1, 2, 3, 4 or 5; and

wherein the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl; lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl; or alkylheterocycle optionally is substituted with one or more of halogen; $-\text{OH}$; $-\text{OR}^2$; $-\text{SH}$; $-\text{SR}^2$; oxime; hydrazine; $-\text{C}(=\text{O})\text{H}$; $-\text{C}(=\text{W})\text{H}$; $-\text{C}(=\text{O})\text{R}^2$; $-\text{C}(=\text{W})\text{R}^2$; $-\text{C}(=\text{O})\text{OH}$; $-\text{C}(=\text{W})\text{OH}$; $-\text{C}(=\text{O})\text{OR}^2$; $-\text{C}(=\text{W})\text{OR}^2$; $-\text{C}(=\text{O})\text{SH}$; $-\text{C}(=\text{W})\text{SH}$; $-\text{C}(=\text{O})\text{SR}^2$; $-\text{C}(=\text{W})\text{SR}^2$; $-\text{C}(=\text{O})\text{NH}_2$; $-\text{C}(=\text{W})\text{NH}_2$; $-\text{C}(=\text{O})-\text{NHR}^2$; $-\text{C}(=\text{W})\text{NHR}^2$; $-\text{C}(=\text{O})\text{NR}^2\text{R}^3$; $-\text{C}(=\text{W})-\text{NR}^2\text{R}^3$; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{S}(\text{O})_n-\text{R}^3$; C_{1-3} alkoxy; C_{1-3} thioether; or an amino acid residue;

optionally in a pharmaceutically acceptable carrier or diluent.

Claim 24 (previously presented): A method for the treatment or prophylaxis of an HIV-infection in a host, wherein the HIV is resistant to one or more reverse transcriptase inhibitor(s), comprising administering to said host an effective anti-HIV treatment amount of a compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid); or $-(CH_2)_p$ -(amino acid);

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$, $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHCO-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-CR^2R^2-S(O)_n-R^3$; $-CR^2R^2NH_2$; $-CR^2R^2NHR^2$; $-CR^2R^2NR^2R^3$; $-CR^2R^2-C(=O)R^2$; alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; or $-(CH_2)_p$ -(amino acid);

wherein if $R^{5'}$ is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHCO-C_{1-3}alkyl$; or $-NHCO-C_{1-3}alkyl$, then at least one of $R^{4'}$, $R^{6'}$ and $R^{7'}$ is not hydrogen; or alternatively, wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen;

Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)-NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl

bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^3$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; $-\text{CN}$; or halo;

Y is O; S; or $\text{S}(\text{O})_n$;

each W is independently O; S; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^2$; $-\text{N-CN}$; $-\text{N-NH}_2$; $-\text{N-NHR}^2$; $-\text{N-NR}^2\text{R}^3$; $-\text{N-OH}$; or $-\text{N-OR}^2$;

each R^2 is independently hydrogen; an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; or vinyl bromide;

each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^2$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^2$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; optionally substituted or unsubstituted aryl; optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl; optionally substituted or unsubstituted alkylheterocycle; optionally substituted or unsubstituted aralkyl; or optionally substituted or unsubstituted heterocycle-alkyl;

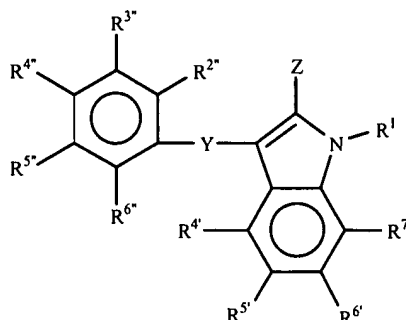
each n is independently 0, 1 or 2;

each p is independently 0, 1, 2, 3, 4 or 5; and

wherein the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl; lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl; or alkylheterocycle optionally is substituted with one or more of halogen; $-\text{OH}$; $-\text{OR}^2$; $-\text{SH}$; $-\text{SR}^2$; oxime; hydrazine; $-\text{C}(=\text{O})\text{H}$; $-\text{C}(=\text{W})\text{H}$; $-\text{C}(=\text{O})\text{R}^2$; $-\text{C}(=\text{W})\text{R}^2$; $-\text{C}(=\text{O})\text{OH}$; $-\text{C}(=\text{W})\text{OH}$; $-\text{C}(=\text{O})\text{OR}^2$; $-\text{C}(=\text{W})\text{OR}^2$; $-\text{C}(=\text{O})\text{SH}$; $-\text{C}(=\text{W})\text{SH}$; $-\text{C}(=\text{O})\text{SR}^2$; $-\text{C}(=\text{W})\text{SR}^2$; $-\text{C}(=\text{O})\text{NH}_2$; $-\text{C}(=\text{W})\text{NH}_2$; $-\text{C}(=\text{O})-\text{NHR}^2$; $-\text{C}(=\text{W})\text{NHR}^2$; $-\text{C}(=\text{O})\text{NR}^2\text{R}^3$; $-\text{C}(=\text{W})-\text{NR}^2\text{R}^3$; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{S}(\text{O})_n-\text{R}^3$; C_{1-3} alkoxy; C_{1-3} thioether; or an amino acid residue;

in combination and/or alternation with one or more other anti-HIV agent, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 25 (withdrawn): A method for salvage therapy in the treatment or prophylaxis of an HIV-infection in a host, comprising administering to said host an effective anti-HIV treatment amount of a compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid); or $-(CH_2)_p$ -(amino acid);

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$, $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHCO-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-CR^2R^2-S(O)_n-R^3$; $-CR^2R^2NH_2$; $-CR^2R^2NHR^2$; $-CR^2R^2NR^2R^3$; $-CR^2R^2-C(=O)R^2$; alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; or $-(CH_2)_p$ -(amino acid);

wherein if $R^{5'}$ is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHCO-C_{1-3}alkyl$; or $-NHCO-C_{1-3}alkyl$, then at least one of $R^{4'}$, $R^{6'}$ and $R^{7'}$ is not hydrogen; or alternatively, wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen;

Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl

bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^3$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; $-\text{CN}$; or halo;

Y is O; S; or $\text{S}(\text{O})_n$;

each W is independently O; S; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^2$; $-\text{N-CN}$; $-\text{N-NH}_2$; $-\text{N-NHR}^2$; $-\text{N-NR}^2\text{R}^3$; $-\text{N-OH}$; or $-\text{N-OR}^2$;

each R^2 is independently hydrogen; an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; or vinyl bromide;

each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^2$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^2$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; optionally substituted or unsubstituted aryl; optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl; optionally substituted or unsubstituted alkylheterocycle; optionally substituted or unsubstituted aralkyl; or optionally substituted or unsubstituted heterocycle-alkyl;

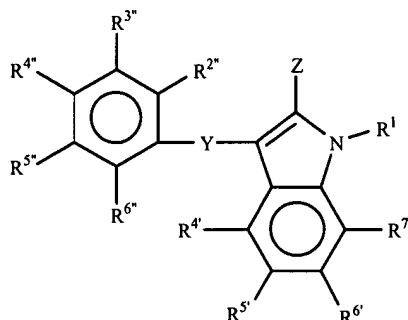
each n is independently 0, 1 or 2;

each p is independently 0, 1, 2, 3, 4 or 5; and

wherein the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl; lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl; or alkylheterocycle optionally is substituted with one or more of halogen; $-\text{OH}$; $-\text{OR}^2$; $-\text{SH}$; $-\text{SR}^2$; oxime; hydrazine; $-\text{C}(=\text{O})\text{H}$; $-\text{C}(=\text{W})\text{H}$; $-\text{C}(=\text{O})\text{R}^2$; $-\text{C}(=\text{W})\text{R}^2$; $-\text{C}(=\text{O})\text{OH}$; $-\text{C}(=\text{W})\text{OH}$; $-\text{C}(=\text{O})\text{OR}^2$; $-\text{C}(=\text{W})\text{OR}^2$; $-\text{C}(=\text{O})\text{SH}$; $-\text{C}(=\text{W})\text{SH}$; $-\text{C}(=\text{O})\text{SR}^2$; $-\text{C}(=\text{W})\text{SR}^2$; $-\text{C}(=\text{O})\text{NH}_2$; $-\text{C}(=\text{W})\text{NH}_2$; $-\text{C}(=\text{O})-\text{NHR}^2$; $-\text{C}(=\text{W})\text{NHR}^2$; $-\text{C}(=\text{O})\text{NR}^2\text{R}^3$; $-\text{C}(=\text{W})-\text{NR}^2\text{R}^3$; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{S}(\text{O})_n-\text{R}^3$; C_{1-3} alkoxy; C_{1-3} thioether; or an amino acid residue;

optionally in a pharmaceutically acceptable carrier or diluent.

Claim 26 (withdrawn): A method for salvage therapy in the treatment or prophylaxis of an HIV-infection in a host, comprising administering to said host an effective anti-HIV treatment amount of a compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid); or $-(CH_2)_p$ -(amino acid);

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$, $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHSO_2-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-CR^2R^2-S(O)_n-R^3$; $-CR^2R^2NH_2$; $-CR^2R^2NHR^2$; $-CR^2R^2NR^2R^3$; $-CR^2R^2-C(=O)R^2$; alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; or $-(CH_2)_p$ -(amino acid);

wherein if $R^{5'}$ is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHSO_2-C_{1-3}alkyl$; or $-NHCO-C_{1-3}alkyl$, then at least one of $R^{4'}$, $R^{6'}$ and $R^{7'}$ is not hydrogen; or alternatively, wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen;

Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)-NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl

bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^3$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; $-\text{CN}$; or halo;

Y is O; S; or $\text{S}(\text{O})_n$;

each W is independently O; S; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^2$; $-\text{N-CN}$; $-\text{N-NH}_2$; $-\text{N-NHR}^2$; $-\text{N-NR}^2\text{R}^3$; $-\text{N-OH}$; or $-\text{N-OR}^2$;

each R^2 is independently hydrogen; an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; or vinyl bromide;

each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^2$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^2$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; optionally substituted or unsubstituted aryl; optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl; optionally substituted or unsubstituted alkylheterocycle; optionally substituted or unsubstituted aralkyl; or optionally substituted or unsubstituted heterocycle-alkyl;

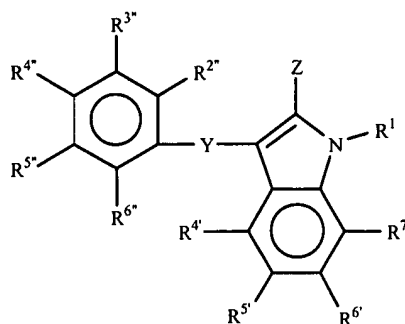
each n is independently 0, 1 or 2;

each p is independently 0, 1, 2, 3, 4 or 5; and

wherein the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl; lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl; or alkylheterocycle optionally is substituted with one or more of halogen; $-\text{OH}$; $-\text{OR}^2$; $-\text{SH}$; $-\text{SR}^2$; oxime; hydrazine; $-\text{C}(=\text{O})\text{H}$; $-\text{C}(=\text{W})\text{H}$; $-\text{C}(=\text{O})\text{R}^2$; $-\text{C}(=\text{W})\text{R}^2$; $-\text{C}(=\text{O})\text{OH}$; $-\text{C}(=\text{W})\text{OH}$; $-\text{C}(=\text{O})\text{OR}^2$; $-\text{C}(=\text{W})\text{OR}^2$; $-\text{C}(=\text{O})\text{SH}$; $-\text{C}(=\text{W})\text{SH}$; $-\text{C}(=\text{O})\text{SR}^2$; $-\text{C}(=\text{W})\text{SR}^2$; $-\text{C}(=\text{O})\text{NH}_2$; $-\text{C}(=\text{W})\text{NH}_2$; $-\text{C}(=\text{O})-\text{NHR}^2$; $-\text{C}(=\text{W})\text{NHR}^2$; $-\text{C}(=\text{O})\text{NR}^2\text{R}^3$; $-\text{C}(=\text{W})-\text{NR}^2\text{R}^3$; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{S}(\text{O})_n-\text{R}^3$; C_{1-3} alkoxy; C_{1-3} thioether; or an amino acid residue;

in combination and/or alternation with one or more other anti-HIV agent, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 27 (previously presented): A method for the treatment or prophylaxis of an HIV-infection in a host, wherein the HIV is resistant to one or more reverse transcriptase inhibitor(s), comprising administering to said host an effective anti-HIV treatment amount of a compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid); or $-(CH_2)_p$ -(amino acid);

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$, $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHCO-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-CR^2R^2-S(O)_n-R^3$; $-CR^2R^2NH_2$; $-CR^2R^2NHR^2$; $-CR^2R^2NR^2R^3$; $-CR^2R^2-C(=O)R^2$; alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; or $-(CH_2)_p$ -(amino acid);

wherein if $R^{5'}$ is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHCO-C_{1-3}alkyl$; or $-NHCO-C_{1-3}alkyl$, then at least one of $R^{4'}$, $R^{6'}$ and $R^{7'}$ is not hydrogen; or alternatively, wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen;

Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl

bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^3$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; $-\text{CN}$; or halo;

Y is O; S; or $\text{S}(\text{O})_n$;

each W is independently O; S; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^2$; $-\text{N-CN}$; $-\text{N-NH}_2$; $-\text{N-NHR}^2$; $-\text{N-NR}^2\text{R}^3$; $-\text{N-OH}$; or $-\text{N-OR}^2$;

each R^2 is independently hydrogen; an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; or vinyl bromide;

each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^2$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^2$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; optionally substituted or unsubstituted aryl; optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl; optionally substituted or unsubstituted alkylheterocycle; optionally substituted or unsubstituted aralkyl; or optionally substituted or unsubstituted heterocycle-alkyl;

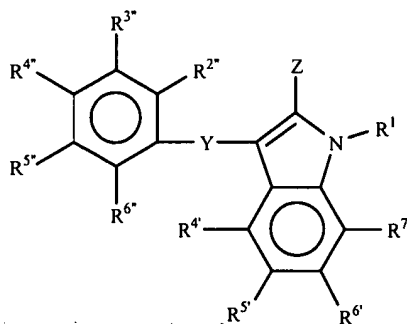
each n is independently 0, 1 or 2;

each p is independently 0, 1, 2, 3, 4 or 5; and

wherein the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl; lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl; or alkylheterocycle optionally is substituted with one or more of halogen; $-\text{OH}$; $-\text{OR}^2$; $-\text{SH}$; $-\text{SR}^2$; oxime; hydrazine; $-\text{C}(=\text{O})\text{H}$; $-\text{C}(=\text{W})\text{H}$; $-\text{C}(=\text{O})\text{R}^2$; $-\text{C}(=\text{W})\text{R}^2$; $-\text{C}(=\text{O})\text{OH}$; $-\text{C}(=\text{W})\text{OH}$; $-\text{C}(=\text{O})\text{OR}^2$; $-\text{C}(=\text{W})\text{OR}^2$; $-\text{C}(=\text{O})\text{SH}$; $-\text{C}(=\text{W})\text{SH}$; $-\text{C}(=\text{O})\text{SR}^2$; $-\text{C}(=\text{W})\text{SR}^2$; $-\text{C}(=\text{O})\text{NH}_2$; $-\text{C}(=\text{W})\text{NH}_2$; $-\text{C}(=\text{O})-\text{NHR}^2$; $-\text{C}(=\text{W})\text{NHR}^2$; $-\text{C}(=\text{O})\text{NR}^2\text{R}^3$; $-\text{C}(=\text{W})-\text{NR}^2\text{R}^3$; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NHSO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NHCO}-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{S}(\text{O})_n-\text{R}^3$; C_{1-3} alkoxy; C_{1-3} thioether; or an amino acid residue;

optionally in a pharmaceutically acceptable carrier or diluent.

Claim 28 (previously presented): A method for the treatment or prophylaxis of an HIV-infection in a host, wherein the HIV has a mutation at lysine 103 → asparagine and/or tyrosine 181 → cysteine in HIV reverse transcriptase, comprising administering to said host an effective anti-HIV treatment amount of a compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein

R^1 is hydrogen; acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH-(CH_2)_p$ -(amino acid); or $-(CH_2)_p$ -(amino acid);

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$, $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OH$; $-OR^2$; $-SH$; $-SR^2$; $-NH_2$; $-NHR^2$; $-NR^2R^3$; $-NHCO-C_{1-3}alkyl$; $-NR^2SO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; $-NR^2CO-C_{1-3}alkyl$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-CR^2R^2-S(O)_n-R^3$; $-CR^2R^2NH_2$; $-CR^2R^2NHR^2$; $-CR^2R^2NR^2R^3$; $-CR^2R^2-C(=O)R^2$; alkacyl; optionally substituted or unsubstituted acyl; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; or $-(CH_2)_p$ -(amino acid);

wherein if $R^{5'}$ is hydrogen, F, Cl, Br, $-NO_2$, $-CN$, $-OR^2$, $-NR^2R^2$, $-NHCO-C_{1-3}alkyl$; or $-NHCO-C_{1-3}alkyl$, then at least one of $R^{4'}$, $R^{6'}$ and $R^{7'}$ is not hydrogen; or alternatively, wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen;

Z is optionally substituted or unsubstituted acyl, $-C(=O)NH_2$; $-C(=W)NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); an amino acid; $-(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)H$; $-C(=W)H$; $-C(=O)R^2$; $-C(=W)R^2$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)OR^2$; $-C(=O)SH$; $-C(=W)SH$; $-C(=O)SR^2$; $-C(=W)SR^2$; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl

bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^3$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^3$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; $-\text{CN}$; or halo;

Y is O; S; or $\text{S}(\text{O})_n$;

each W is independently O; S; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^2$; $-\text{N-CN}$; $-\text{N-NH}_2$; $-\text{N-NHR}^2$; $-\text{N-NR}^2\text{R}^3$; $-\text{N-OH}$; or $-\text{N-OR}^2$;

each R^2 is independently hydrogen; an optionally substituted or unsubstituted branched or unbranched lower alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; or vinyl bromide;

each R^3 is independently hydrogen; optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl; CH_3 ; CF_3 ; vinyl bromide; $-\text{CR}^2\text{R}^2-\text{S}(\text{O})_n-\text{R}^2$; $-\text{CR}^2\text{R}^2\text{NH}_2$; $-\text{CR}^2\text{R}^2\text{NHR}^2$; $-\text{CR}^2\text{R}^2\text{NR}^2\text{R}^2$; $-\text{CR}^2\text{R}^2-\text{C}(=\text{O})\text{R}^2$; optionally substituted or unsubstituted aryl; optionally substituted or unsubstituted heterocycle; optionally substituted or unsubstituted alkylaryl; optionally substituted or unsubstituted alkylheterocycle; optionally substituted or unsubstituted aralkyl; or optionally substituted or unsubstituted heterocycle-alkyl;

each n is independently 0, 1 or 2;

each p is independently 0, 1, 2, 3, 4 or 5; and

wherein the optionally substituted branched or unbranched alkyl, alkenyl, alkynyl, lower alkyl, lower alkenyl; lower alkynyl; acyl; aryl; heterocycle; alkaryl; alkheterocycle; arylalkyl; or alkylheterocycle optionally is substituted with one or more of halogen; $-\text{OH}$; $-\text{OR}^2$; $-\text{SH}$; $-\text{SR}^2$; oxime; hydrazine; $-\text{C}(=\text{O})\text{H}$; $-\text{C}(=\text{W})\text{H}$; $-\text{C}(=\text{O})\text{R}^2$; $-\text{C}(=\text{W})\text{R}^2$; $-\text{C}(=\text{O})\text{OH}$; $-\text{C}(=\text{W})\text{OH}$; $-\text{C}(=\text{O})\text{OR}^2$; $-\text{C}(=\text{W})\text{OR}^2$; $-\text{C}(=\text{O})\text{SH}$; $-\text{C}(=\text{W})\text{SH}$; $-\text{C}(=\text{O})\text{SR}^2$; $-\text{C}(=\text{W})\text{SR}^2$; $-\text{C}(=\text{O})\text{NH}_2$; $-\text{C}(=\text{W})\text{NH}_2$; $-\text{C}(=\text{O})-\text{NHR}^2$; $-\text{C}(=\text{W})\text{NHR}^2$; $-\text{C}(=\text{O})\text{NR}^2\text{R}^3$; $-\text{C}(=\text{W})-\text{NR}^2\text{R}^3$; $-\text{NH}_2$; $-\text{NHR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NH}\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NH}\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{NR}^2\text{CO}-\text{C}_{1-3}\text{alkyl}$; $-\text{S}(\text{O})_n-\text{R}^3$; C_{1-3} alkoxy; C_{1-3} thioether; or an amino acid residue;

in combination and/or alternation with one or more other anti-HIV agent, optionally in a pharmaceutically acceptable carrier or diluent.

Claim 29 (original): The method of any one of claims 19-28 wherein the host is a human.

Claim 30 (New): The method of any one of claims 19 or 24 wherein:

R^1 is hydrogen;

$\text{R}^{4'}$, $\text{R}^{5'}$, $\text{R}^{6'}$, $\text{R}^{7'}$ are each independently H; halo; $-\text{NO}_2$; $-\text{CN}$; $-\text{OR}^2$; $-\text{NR}^2\text{R}^3$; $-\text{NH}\text{SO}_2-\text{C}_{1-3}\text{alkyl}$; $-\text{NH}\text{CO}-\text{C}_{1-3}\text{alkyl}$; oxime, hydrazine, or C_{1-3} alkyl or alkenyl optionally substituted with one or more of $-\text{OH}$, $-\text{SH}$, $-\text{C}(\text{O})\text{H}$, $-\text{COOH}$, halogen, $-\text{NR}^2\text{R}^2$, $-\text{C}_{1-3}$

alkoxy or C₁₋₃ thioether, wherein if R^{5'} is hydrogen, F, Cl, Br, -NO₂, -CN, -OR², -NR²R², -NHSO₂-C₁₋₃alkyl; or -NHCO-C₁₋₃alkyl, then at least one of R^{4'}, R^{6'} and R^{7'} is not hydrogen; or alternatively, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H; halo; -NO₂; -CN; -OH; -OR²; -NR²R³; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; C₁₋₅alkoxy; oxime, hydrazine, -C₁₋₅alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -CN, -C(=W)NR²R³, -C(=O)R³, -C(=O)OR³, -CR²R²-S(O)_n-R³, -CR²R²NHR², CR²R²-CO-R² or substituted or unsubstituted lower alkyl;

Y is O; S; or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²; and

each R² is independently hydrogen or C₁₋₃ alkyl.

Claim 31(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H; halo; -NO₂; -CN; -OR²; -NR²R³; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; oxime, hydrazine, or C₁₋₃ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₃alkoxy or C₁₋₃ thioether, wherein if R^{5'} is hydrogen, F, Cl, Br, -NO₂, -CN, -OR², -NR²R², -NHSO₂-C₁₋₃alkyl; or -NHCO-C₁₋₃alkyl, then at least one of R^{4'}, R^{6'} and R^{7'} is not hydrogen; or alternatively, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H; halo; -NO₂; -CN; -OR²; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; oxime, hydrazine, -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=W)NR²R³ or -C(=O)R³; -CR²R²NHR², CR²R²-CO-R² or substituted or unsubstituted lower alkyl;

Y is O or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R³ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 32(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H; halo; -NO₂; -CN; -OR²; -NR²R³; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; oxime, hydrazine, or C₁₋₃ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₃alkoxy or C₁₋₃ thioether, wherein if R^{5'} is hydrogen, F, Cl, Br, -NO₂, -CN, -OR², -NR²R², -NHSO₂-C₁₋₃alkyl; or -NHCO-C₁₋₃alkyl, then at least one of R^{4'}, R^{6'} and R^{7'} is not hydrogen; or alternatively, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H; halo; -NO₂; -CN; -OH; -OR²; -NR²R³; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; C₁₋₅alkoxy; oxime, hydrazine, -C₁₋₅alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy;

Z is -C(=W)NR²R³ or -C(=O)R³; -CR²R²NHR², CR²R²-CO-R² or substituted or unsubstituted lower alkyl;

Y is O or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R³ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 33 (New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H; halo; -NO₂; -CN; -OR²; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; oxime, hydrazine, -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=W)NR²R³, -C(=O)R³ or -CR²R²NHR²;

Y is O or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R₃ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 34(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H; halo; -NO₂; -CN; -OR²; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; oxime, hydrazine, -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=O)R³;

Y is O or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R₃ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 35(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H; halo; or -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=W)NR²R³ or -C(=O)R³;

Y is O or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R₃ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 36(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H or -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=W)NR²R³ or -C(=O)R³;

Y is O or S(O)_n;

each W is independently O or S;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R₃ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 37(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H; halo; -NO₂; -CN; -OR²; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; oxime, hydrazine, -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy;

Z is -C(=W)NR²R³ or -C(=O)R³;

Y is O or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R₃ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 38(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H or -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=W)NR²R³ or -C(=O)R³;

Y is O or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R₃ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 39(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H or -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=O)R³;

Y is O or S(O)_n;

each W is independently O; S; -N-CN or -N-OR²;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R₃ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 40(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H or -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=W)NR²R³ or -C(=O)R³;

Y is O or S(O)_n;

each W is independently O;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R₃ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 41 (New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H or -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=W)NR²R³;

Y is O or S(O)_n;

each W is independently O or S;

each R^2 is independently hydrogen or C_{1-3} alkyl; and

each R^3 is independently C_{1-5} alkyl, C_{1-5} alkenyl, aryl or heterocycle substituted with one or more of $C(O)NR^2R^2$, $-NR^2R^2$, $-(CH)_mC(O)NR^2R^2$, $-(CH)_mC(=W)-NH(CH_2)_p$ -(amino acid).

Claim 42(New): The method of any one of claims 19 or 24 wherein:

R^1 is hydrogen;

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are each independently H or halo;

$R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H or $-C_{1-5}$ alkyl or alkenyl optionally substituted with one or more of $-OH$, $-SH$, $-C(O)H$, $-COOH$, halogen, $-NR^2R^2$, $-C_{1-5}$ thioether or $-C_{1-5}$ alkoxy,

Z is $-C(=W)NR^2R^3$;

Y is $S(O)_n$;

each W is independently O;

each R^2 is independently hydrogen or C_{1-3} alkyl; and

each R^3 is independently C_{1-5} alkyl, C_{1-5} alkenyl, aryl or heterocycle substituted with one or more of $C(O)NR^2R^2$, $-NR^2R^2$, $-(CH)_mC(O)NR^2R^2$, $-(CH)_mC(=W)-NH(CH_2)_p$ -(amino acid).

Claim 43(New): The method of any one of claims 19 or 24 wherein:

R^1 is hydrogen;

$R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are each independently H or halo;

$R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently H; halo; $-NO_2$; $-CN$; $-OR^2$; $-NHSO_2-C_{1-3}alkyl$; $-NHCO-C_{1-3}alkyl$; oxime, hydrazine, $-C_{1-5}$ alkyl or alkenyl optionally substituted with one or more of $-OH$, $-SH$, $-C(O)H$, $-COOH$, halogen, $-NR^2R^2$, $-C_{1-5}$ thioether or $-C_{1-5}$ alkoxy,

Z is $-C(=O)R^3$;

Y is $S(O)_n$;

each W is independently O;

each R^2 is independently hydrogen or C_{1-3} alkyl; and

each R³ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 44(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H; halo; -NO₂; -CN; -OR²; -NHSO₂-C₁₋₃alkyl; -NHCO-C₁₋₃alkyl; oxime, hydrazine, -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=O)R³;

Y is O or S(O)_n;

each W is independently O;

each R² is independently hydrogen or C₁₋₃ alkyl; and

each R³ is independently C₁₋₅ alkyl, C₁₋₅ alkenyl, aryl or heterocycle substituted with one or more of C(O)NR²R², -NR²R², -(CH)_mC(O)NR²R², -(CH)_mC(=W)-NH(CH₂)_p-(amino acid).

Claim 45(New) The method of any one of claims 19 or 24 wherein R¹ is hydrogen.

Claim 46(New): The method of any one of claims 19 or 24 wherein:

R¹ is hydrogen;

R^{4'}, R^{5'}, R^{6'}, R^{7'} are each independently H or halo, wherein at least two of R^{4'}, R^{6'} or R^{7'} is not hydrogen;

R^{2''}, R^{3''}, R^{4''}, R^{5''} and R^{6''} are each independently H or -C₁₋₅ alkyl or alkenyl optionally substituted with one or more of -OH, -SH, -C(O)H, -COOH, halogen, -NR²R², -C₁₋₅ thioether or -C₁₋₅ alkoxy,

Z is -C(=W)NR²R³;

Y is O or S(O)_n;

each W is independently O;

each R^2 is independently hydrogen or C_{1-3} alkyl; and

each R^3 is independently C_{1-5} alkyl, C_{1-5} alkenyl, aryl or heterocycle substituted with one or more of $C(O)NR^2R^2$, $-NR^2R^2$, $-(CH)_mC(O)NR^2R^2$, $-(CH)_mC(=W)-NH(CH_2)_p$ -(amino acid).

Claim 47(New) The method of any one of claims 19 or 24 wherein R_1 is hydrogen.

Claim 48(New) The method of any one of claims 19 or 24 wherein R_1 is hydrogen.

Claim 49(New): The method of any one of claims 19 or 24 wherein Z is $-C(=O)NH_2$; $-C(=W)-NH_2$; $-C(=O)NHR^2$; $-C(=W)NHR^2$; $-C(=O)NR^2R^3$; $-C(=W)NR^2R^3$; $-C(=W)NH(CH_2)_p$ -(amino acid); $-C(=O)R^3$; $-C(=O)OR^3$; $-C(=O)OH$; $-C(=W)OH$; $-C(=O)OR^2$; $-C(=W)-OR^2$.

Claim 50(New): The method of any one of claims 19 or 24 wherein Z is $-C(=O)NH_2$; $-C(=O)NHR^2$ or $-C(=O)NR^2R^3$.

Claim 51 (New): The method of any one of claims 19 or 24 wherein Y is SO_2 .

Claim 52 (New): The method of any one of claims 19 or 24 wherein $R^{4'}$, $R^{5'}$, $R^{6'}$ and $R^{7'}$ are each independently H or halo.

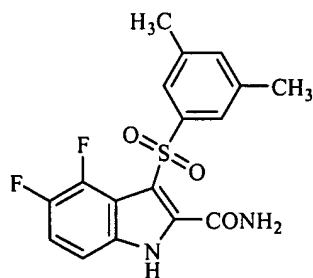
Claim 53(New): The method of any one of claims 19 or 24 wherein at least two of $R^{4'}$, $R^{5'}$, $R^{6'}$, $R^{7'}$ are not hydrogen.

Claim 54(New): The method of any one of claims 19 or 24 wherein $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently optionally substituted or unsubstituted branched or unbranched alkyl, alkenyl or alkynyl.

Claim 55 (New): The method of any one of claims 19 or 24 wherein $R^{2''}$, $R^{3''}$, $R^{4''}$, $R^{5''}$ and $R^{6''}$ are each independently unsubstituted unbranched alkyl.

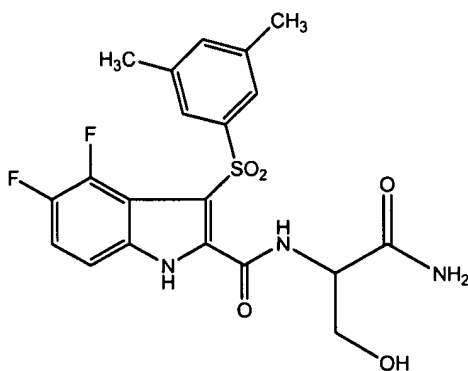
Claim 56 (New): The method of any one of claims 19 or 24 wherein R_1 is hydrogen.

Claim 57(New): The method of any one of claims 19 or 24 wherein the compound is a compound of formula



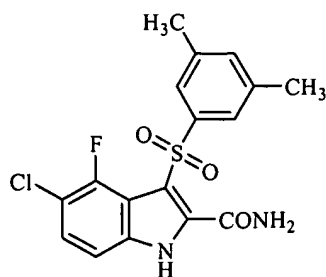
or a pharmaceutically acceptable salt thereof.

Claim 58(New): The method of any one of claims 19 or 24 wherein the compound is a compound of formula



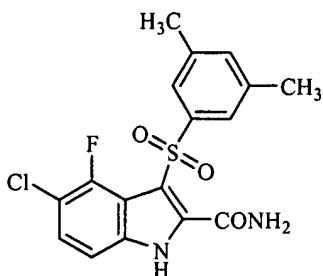
or a pharmaceutically acceptable salt thereof.

Claim 59(New): The method of any one of claims 19 or 24 wherein the compound is a compound of formula



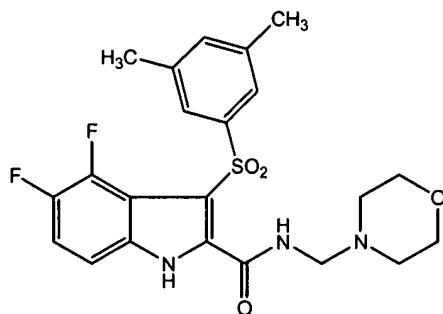
or a pharmaceutically acceptable salt thereof.

Claim 60(New): The method of any one of claims 19 or 24 wherein the compound is a compound of formula



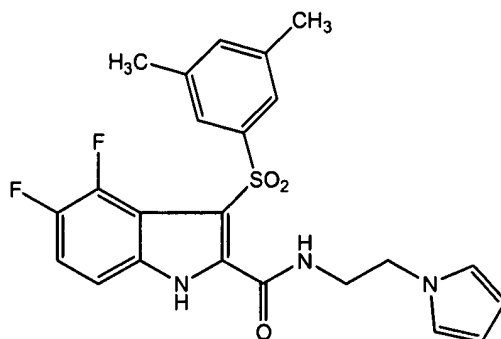
or a pharmaceutically acceptable salt thereof.

Claim 61 (New): The method of any one of claims 19 or 24 wherein the compound is a compound of formula



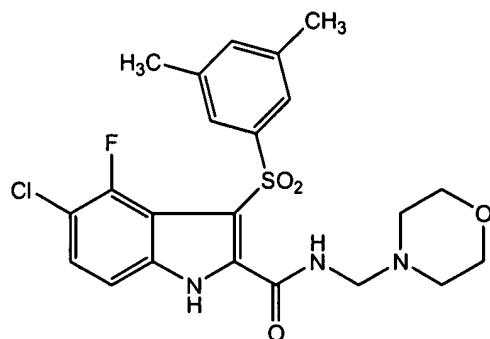
or a pharmaceutically acceptable salt thereof.

Claim 62(New): The method of any one of claims 19 or 24 wherein the compound is a compound of formula



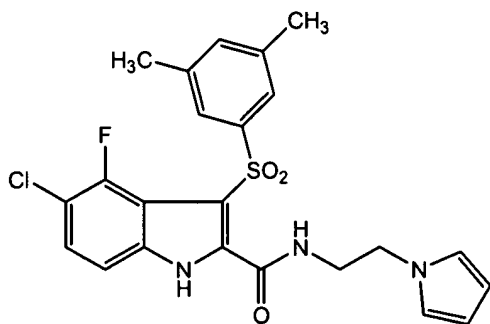
or a pharmaceutically acceptable salt thereof.

Claim 63 (New): The method of any one of claims 19 or 24 wherein the compound is a compound of formula



or a pharmaceutically acceptable salt thereof.

Claim 64(New): The method of any one of claims 19 or 24 wherein the compound is a compound of formula



or a pharmaceutically acceptable salt thereof.